

Urban Acupuncture—A Methodology for the Sustainable Rehabilitation of “Society Buildings” in Vancouver’s Chinatown into Contemporary Housing

One of the consequences of Vancouver’s explosive real estate market is the pressure to find housing development opportunities within the urban core, a pressure being felt by Vancouver’s Chinatown.

There is a need for careful and thoughtful research into the limitations and potentials of Chinatown’s unique urban fabric. Without thoughtful research, Chinatown could face one of two fates: First, Chinatown could be replaced with standard, podium-point, tower condominiums. Second, redevelopment of Chinatown would retain only historic facades as cladding on new buildings, which would result in the loss of the cultural substance of one of Vancouver’s oldest neighbourhoods.

This study proposes an economically, environmentally and culturally sustainable approach to the sustainable rehabilitation of four Chinatown “society buildings”—buildings built by benevolent societies and family clan associations that offered housing and assistance to community members—as contemporary housing.

CONTEXT

The growth of Chinatown is linked historically with the influence of Chinese immigration during the 1858 Gold Rush and CPR railway construction. It is now linked to the massive influx of business class immigrants in the 80s and 90s, even though recent immigrants move to less-urban communities in Richmond, Coquitlam and Burnaby.

The effects of drugs, homelessness and prostitution, and the collapse of nearby Hastings Street in the downtown East Side, forced Chinatown into a period of decline. Today, Chinatown is at a key moment in its evolution. It is a functioning community, not a tourist attraction as in some North American cities, but it has come of age. It must now choose to exist or risk disappearing altogether. As a symbol of the role of Asia in North America, Chinatown expresses where we have been, where we are, and what we will be in the future.



Figure 1 Chinatown Streetscape

Historically, Chinatown’s Societies offered housing and assistance to community members in the form of bunkhouses and SROs (single resident occupancies). Many of the historic and heritage society buildings in Chinatown do not meet base standard of living and code requirements and are only partially operational. Society buildings are a complex and unique historic Chinatown architecture. Because of this, they were used as trial models for establishing a methodology to protect and preserve heritage buildings while accommodating adaptations for future inhabitation. The resulting methodology is called “Urban Acupuncture.”

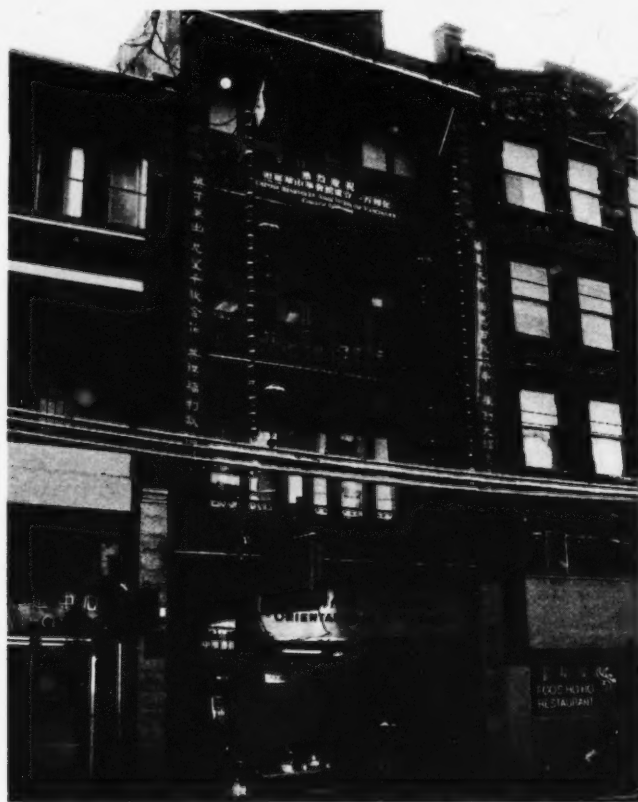


Figure 2 Chinese Benevolent Association Building

HERITAGE AND SUSTAINABILITY

Sustainable rehabilitation of heritage buildings as housing carefully considers the implications of environmental, cultural and economic factors over time and their interrelationship within the overall project. Sustainable development is interdependent with cultural vitality, and should be seen as a vehicle for long-term economic growth, environmental health, poverty alleviation and community development. By viewing heritage as cultural capital, it can be a development asset that can help provide employment, mobilize communities and generate income.

A list of key questions was developed to guide the process, to help form alliances responsive to the unique local conditions of each project, and to help discover meaningful relationships that could direct the design.

These questions were posed from environmental, economic and cultural-social perspectives. It is important to note that there are overlaps and that each question could be asked from the perspective of each category.

APPROACH: URBAN ACUPUNCTURE

Urban acupuncture focuses on the selective redevelopment of appropriate sites within the historic fabric. It carefully removes what isn't working and inserts a contemporary, appropriate intervention to stimulate urban regeneration.

By capitalizing on its unique cultural assets, Chinatown can differentiate itself and set an example for a sensitive yet contemporary approach to historic community regeneration and the development of contemporary housing scenarios.

Urban acupuncture has four major characteristics:

1. Urban acupuncture grows out of interdisciplinary collaboration and research

While design can form the physical framework for sustainable community housing, a sustainable revitalization strategy is collaborative. It is developed with multiple partners through management, policy and community involvement. The project should be developed simultaneously from the top down and the bottom up.

Heritage is constantly evolving, shifting and belongs to many. Because of this, there will be many interpretations of its value. All resources and interested parties should be consulted for information, expertise and ideas. The interested parties include municipal, provincial and federal agencies and policy-makers; academic departments; university and college outreach departments; historians; community organizations; residents (past and present); finance groups; marketing consultants and businesses.

This shift in perspective, to working from within ("emic" approach), both metaphorically and physically, from looking in from the outside ("etic" approach), is the basis of urban acupuncture.

2. Urban acupuncture sees building form as multi-dimensional, not reduced only to the facade

The approach to historic rehabilitation in Canadian cities has tended to focus primarily on the preservation of the superficial exterior qualities of autonomous architectural objects—what has been described as "facadism."

But the facade is only a small part of the building and it is intimately connected to the structure of the whole. The building is a product of the people who inhabited it and the time and context in which it was built. If everything but the exterior is destroyed, not only is there a severing of the interior to the exterior, but any valuable insight into the history of the place is lost.

The urban acupuncture approach sees individual buildings not as a series of discrete artifacts, but as a living environment, interwoven with communal interior and exterior gathering and circulation routes, and a complex layering of public, semi-public, private, and semi-private space.

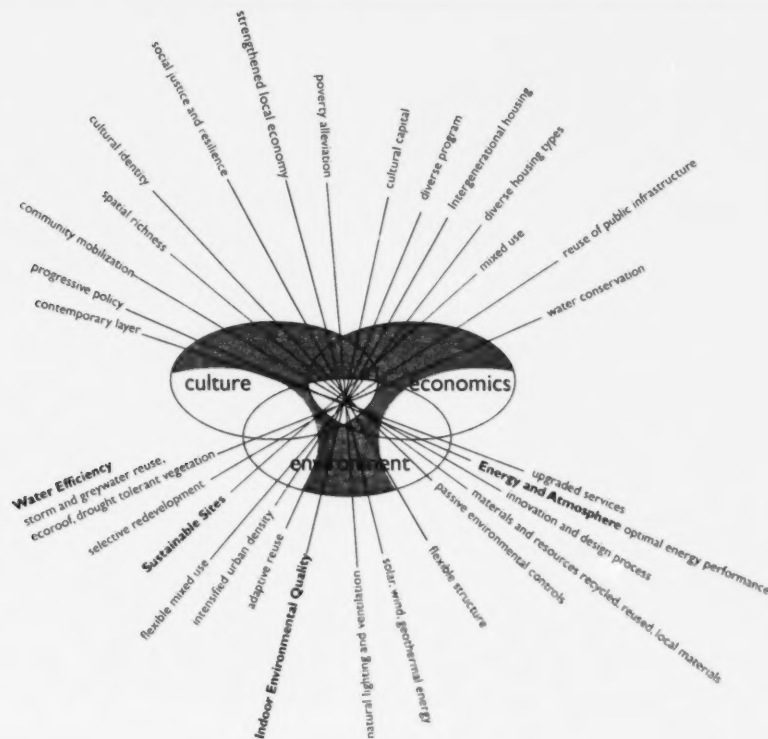


Figure 3 Key Questions

The urban fabric is a complex product and process of adaptation to structural need, technology, environmental factors, economics and sociability that evolves over time. Analyzing architecture from both the outside in and the inside out creates a sense of how building form is derivative of culture, economics and environmental practices.

3. Urban acupuncture supports diverse programs

Diversity is the key to a viable, resilient community. Decisions should be made that support long-term diversity and sustainability.

The Chinatown Revitalization Committee¹ has recommended that Chinatown should not be redeveloped as a tourist destination, but as a thriving, multi-generational community of both residents and visitors.

This means planning for diverse ages, communities, incomes and land uses, including commercial, institutional, light industrial and various types of affordable, intergenerational housing.

Providing a diversity of housing types and land uses allows greater flexibility. Because it does not rely on one market niche it is much more economically sustainable in the long term. By respecting

intergenerational responsibility, heritage restoration addresses current community needs while respecting history and considering community sustainability for generations to come.

4. Urban acupuncture encourages the coexistence of a contemporary layer

The urban fabric embodies collective memory. Intergenerational responsibility connotes that what is present will one day become history.

This necessitates an understanding of architecture as never reaching a state of “completion” but as simultaneously reflective of, and responsive to, contextual conditions. Historic revitalization should include contemporary overlays that widen the historic context and add to a sense of continuity and connection to the past.

This approach allows new ideas to evolve that are relevant to contemporary needs. Revitalization interprets the existing in ways that are meaningful to both the past and present. This approach protects the unique histories and formal attributes of the community and contributes to the development of a community that is uniquely authentic.

1 The Vancouver Chinatown Revitalization Committee (VCRC) was officially formed in 2001, bringing together more than 20 of Chinatown’s social, cultural, resident and business groups to work with the City of Vancouver to develop short-term revitalization initiatives and a long-term vision for Chinatown, along with strategies to implement that vision.

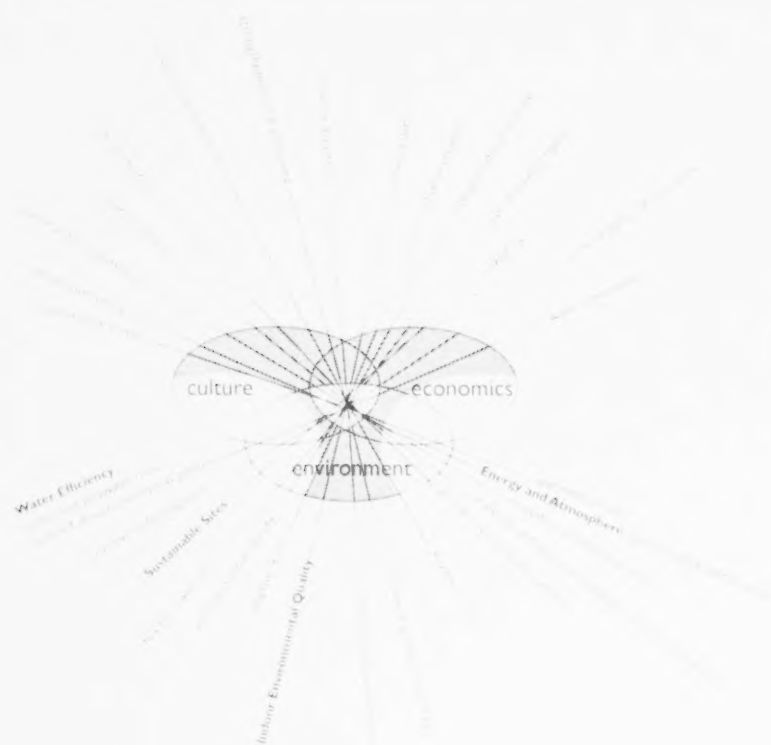


Figure 3. Urban Acupuncture

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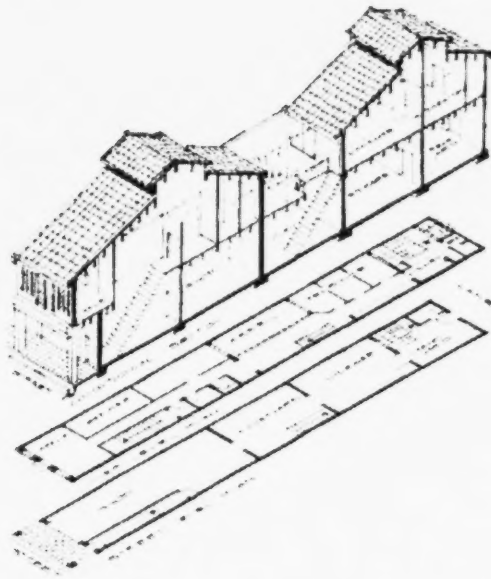


Figure 4 Asian shophouse.

Courtesy of Penny Gurstein

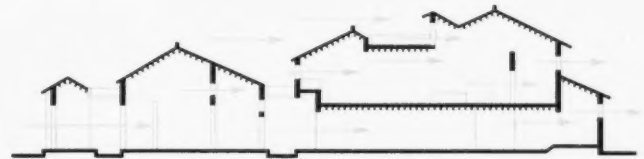


Figure 5 Interconnected environmental controls, circulation and social space

SOCIETY BUILDINGS

The society building is a type unique to North American Chinatowns, a true hybrid architecture that blends aspects of Chinese regional Asian Shophouse typology with western styles and building methods.

The Asian Shophouse is believed to have originated in Guangdong and Fujian Provinces—where many of Vancouver’s society clansmen originate. It went through a multi-faceted, evolutionary process of transformation as trade flourished with China and became a popular building style in Malaysia, Singapore, Thailand and eventually North America.

The society building typology evolved based on climatic conditions, new technologies and shifting social patterns. A unique aspect of the Shophouse and the society building is how environmental controls (courtyards, breezeways and light wells) are connected to the circulation and gathering spaces within the building—from highly private living quarters to communal open spaces and commercial spaces. Complex, multifunctional spaces evolved consciously and subconsciously over time, accommodating and enabling varying levels of privacy and sociability.

There are several society building characteristics identified as derivative of the Asian Shophouse. Each of characteristics was considered for its relevance to the four redevelopment case studies:

- Networked urban circulation
- Mixed use
- Continuous street wall with undulating heights
- Double frontage/Accessible alleyways
- Courtyards and light wells
- Urban breezeways
- Alleyways
- Recessed entry and canopy
- Recessed balconies
- Interior breezeways.
- Mezzanines with prism glass
- Altar and shrines
- Symbolic use of colour and ornamentation



Figure 6 Yue Shan courtyard.

Image courtesy of Codrin Tabala

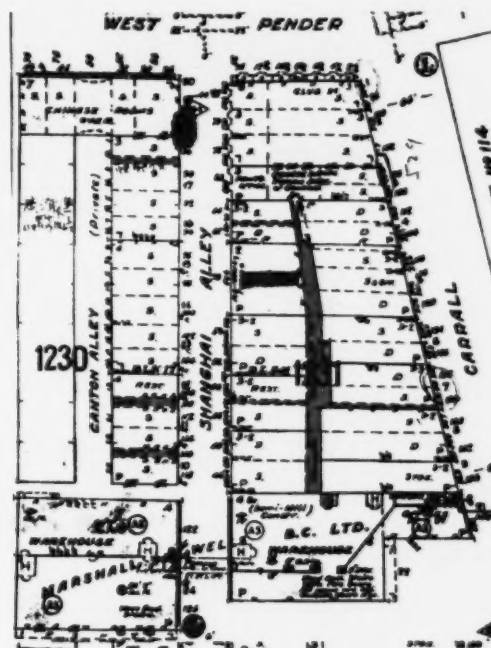


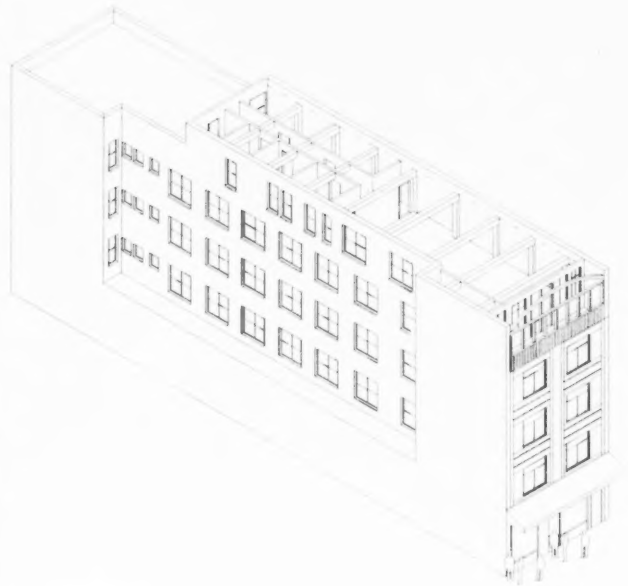
Figure 7 Fire insurance map showing breezeways prior to 1940

CASE STUDIES

The study makes specific rehabilitation recommendations for four society buildings:

- the Mah Society of Canada
- the Lim Sai Hor (Kow Mock) Society
- the Shon Yee Benevolent Society
- the Yue Shan Society.

Each project in the study focuses on one particular issue yet contributes to the generality of all the society buildings. The Mah Society Building discusses diversity in program as well as issues of light and ventilation; the Lim Sai Hor Society Building discusses adaptability and how it relates to new services; the Shon Yee Benevolent Society discusses the potential of a contemporary single-room typology; and the Yue Shan Society discusses networks and courtyards and how they relate to urban living.



I. Mah Society of Canada

The Mah Society has a typical 7.6 m x 36.6 m (25 ft. x 122 ft.) long, narrow footprint. Exit requirements, light, ventilation, water and electricity need to be addressed to bring the building up to contemporary housing standards. In addition, the Mah Society's single-room typology restricts occupancy to a very limited user group. This study focuses on the three mid-lying floors containing the single-room typology that historically provided a transient home for new immigrants.

A variety of unit types is accommodated by eliminating the middle section of the building to create a courtyard. The courtyard not only allows for a diversity of unit types but addresses lighting and ventilation. It also provides an additional means of egress and an outside social space for the residents. As a result of this, new facades could provide the support required for seismic upgrades.

The commercial activity at the ground level and the Society space on the top floor have been preserved for their cultural and economic value. Through preservation and integration, the diversity of uses and the stability that these spaces and their programs promote is maintained.



2. Lim Sai Hor (Kow Mock) Society

The significance of the Lim Sai Hor building is that it fronts two streets, with both facades designed as street frontage. All floors of the building are now occupied, but services are failing and there is visible damage to ceilings, walls and floors.

Like the Mah Society, this building also occupies a single, narrow, long lot but has a measurement of 8.2 m x 36.6 m (26 ft. 10 in. x 122 ft.)—slightly larger than the 7.6 m (24.9 ft.) width typical of Chinatown. This additional 60 cm (24 in.) width allows for a double-loaded corridor. The extra corridor, combined with the unique situation of having an alley park on one side and an open lot on the other, allows a variety of smaller apartments that receive ample natural light and ventilation.

In addition, the new service cores are added in an economically strategic manner to maximize long-term flexibility of unit sizes and divisions.

A new floor is added to the building to accommodate the Society's meeting space and to free the third floor for additional housing program. This gained space could provide the additional revenue to support installing an elevator, which would both benefit new residents and address the common issue of access for senior Society members to the top floor, a common problem in society buildings. Finally, this case study examines the effects on the Lim Sai Hor Building of potential future development of an adjacent empty lot in respect to the allowable building bylaws and regulations.



3. Shon Yee Benevolent Society

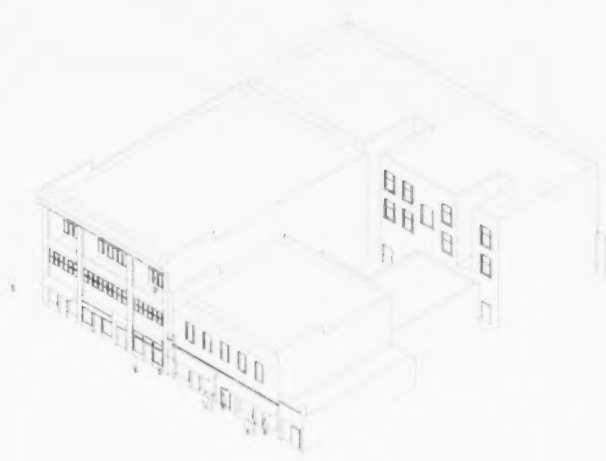
A significant difference between the Mah and Lim Sai Hor society buildings and the Shon Yee Benevolent Society is size. The Shon Yee building comprises three, 7.6 m x 36.6 m (25 ft. x 122 ft.) lots. As a consequence, the Shon Yee Society building is an even denser building typology.

The building contains 50 single rooms lit by narrow, long, lightwells on both sides and another running along the centre of the building. This unique layout was identified as a character to be preserved yet enhanced by better servicing the rooms with light, air and technical services.

The study identified a need for short-term accommodations, mainly for visiting members from around the country and abroad. The proposal looked into joining one, two and three rooms into single larger units. By providing these units with carved out, outdoor spaces that face the lightwells, an added spatial and environmental quality is afforded. Not only does it improve the living conditions it also makes this unique spatial condition visible and accessible.

In keeping with the social programming agenda of the Societies, some of the units could become subsidized housing, supported by the revenue generated by the short-term suites. Each floor has a unique common area. On the first floor, a multi-functional room connects common activities to the street, and on the second floor a glass tube punches perpendicularly to the hallways. Garden terraces occupy the third floor.

Similar to the Lim proposal and the Mah Society's post-1923 addition, an additional half floor is added on top of the Shon Yee Building. This additional space allows the Shon Yee Benevolent Society to move its offices and meeting space, now located outside Chinatown, back to their building. A rooftop garden extends out from the Society meeting area, providing outdoor social spaces where courtyards are non-existent.



4. Yue Shan Society

The main historical significance of the Yue Shan building complex is its street-level sociability and permeability. Breezeways from both Pender Street and Market Alley historically led to an interstitial, lateral breezeway, and a central courtyard, which was used as an intimate, semi-private open space and a space to bring air, daylight and rainwater collection to the interior of the block.

Today the courtyard is partially infilled, the breezeways are blocked, and the ground-level spaces facing the alleyway and courtyard are locked and used as storage. Since the existing housing is working quite well, the proposal re-establishes the block's street-level sociability and its internal permeability and connectivity between the street, alley, courtyard and breezeway.

In order to be livable, high-density living requires outdoor open space and amenities to act as an urban living room that recovers a critical relationship between the public and private realms. Ground-level courtyard spaces are opened up to accommodate the Society's diverse existing programming—martial arts, sports, music, mahjong, table tennis, karaoke and Chinese language lessons. The programming is accommodated with the introduction of a tearoom, youth and senior centre, and commercial studio spaces for society members, residents and the greater community. Trench gardens filter stormwater into underground cisterns for irrigation. Vertical mats of vegetation cleanse the air and ameliorate the climate and high-albedo paving reduces the urban heat island effect. The social, economic and environmental dimensions of the courtyard are re-established and the active life of the Society is stitched back into the greater fabric of Chinatown.

Research Highlight

Urban Acupuncture—A Methodology for the Sustainable Rehabilitation of "Society Buildings" in Vancouver's Chinatown into Contemporary Housing

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